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L. Wells 08/581669
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PATENT APPLICATION
Attorney Docket No. **D/95473**

EXPRESS MAIL LABEL NUMBER: EF204912811US Date of Deposit: DECEMBER 29, 1995

CERTIFICATE OF EXPRESS MAILING

I hereby certify that the following paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231.

Judith C. Bares — Date 12/29/95

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor:	Guibas et al.	Group Art Unit:	Not yet assigned
Serial No.:	Not yet assigned	Examiner:	Not yet assigned
Filed:	December 29, 1995		

Title: **DYNAMIC COMPUTATION OF A LINE SEGMENT ARRANGEMENT USING FINITE PRECISION ARITHMETIC**

INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

In accordance with 37 CFR 1.97(a) and (b), Applicant submits herewith documents and information of which he is aware, which he believes may be material to the examination of this application, and in respect of which there may be a duty to disclose in accordance with 37 CFR 1.56. This Information Disclosure Statement is being filed concurrently with the subject matter application and therefore within three months of the U.S. filing date. In accordance with 37 CFR 1.97(b), **no certification or fee is required.**

This Information Disclosure Statement is not intended to constitute an admission that any information referred to herein is "prior art" in relation to

the claimed invention, unless specifically designated as such. In accordance with 37 CFR 1.97(g) and (h), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that the information submitted herewith is, or is considered to be, material to patentability as defined in 37 CFR 1.56(b).

A list of the enclosed documents filed concurrently with the subject patent application, Attorney Docket No. D/95473, is set forth on the attached Form PTO-1449 (2 pages). A brief summary of the relevance of some of these references is provided below. No inference should be made relating to the relative pertinence of these references based on the order in which they are discussed below or presented in the Form PTO-1449. While the relevance of some of the references has been provided herein, it is requested that the Examiner fully consider each reference in its entirety for its relevance to the subject patent application.

Document AR, the excerpts from the Computational Geometry text by K. Mulmuley, are incorporated by reference into the subject patent application. All of the sections related to trapezoidal decompositions may be relevant to the subject matter of the present invention.

Documents AS and AT, the two articles by K. Mulmuley, are briefly discussed for their relevance in the subject patent application and are incorporated by reference therein.

Document AU, the article by Greene and Yao, is also discussed for its relevance in the subject patent application and is incorporated by reference therein.

Document AV, the article by Gangnet et al., is cited in the subject patent application, and its relevance is briefly discussed therein.

Document AW, the paper by Guibas and Marimont, inventors herein, is incorporated by reference in the subject patent application, and provides additional description of the subject invention.

Document AX, the 1992 article by Edelsbrunner et al., discloses an incremental algorithm for producing a vertical cell decomposition of an arrangement of curves in the plane. Pp. 329 - 331 present a description of the algorithm; at pg. 332, Edelsbrunner et al. appear to suggest that the algorithm may be used to construct a vertical cell decomposition of an arrangement of line segments in the plane. There appears to be no discussion of an implementation using finite precision arithmetic, and it may be assumed from the lack of disclosure that the algorithm disclosed uses an infinite precision model of computer arithmetic.

It is respectfully requested that the information submitted herein and the documents submitted herewith be expressly considered during the examination and prosecution of this application, and that the publicly-available documents be made of record in this application, and appear among the "References Cited" on any patent to issue therefrom.

Respectfully submitted,

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